

# PATENT ABSTRACTS OF JAPAN

(11)Publication number : 11-276524

(43)Date of publication of application : 12.10.1999

(51)Int.Cl.

A61F 13/56

A61F 5/44

(21)Application number : 10-081138

(71)Applicant : UNI CHARM CORP

(22)Date of filing : 27.03.1998

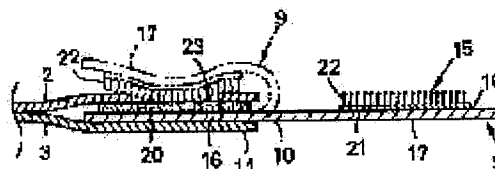
(72)Inventor : SUEKANE MAKOTO

## (54) DISPOSABLE DIAPER

### (57)Abstract:

**PROBLEM TO BE SOLVED:** To make a tape fastener able to be economically and temporarily fastened using a hook member of a mechanical fastener in a disposable diaper.

**SOLUTION:** The inner surface of a fixed end 16 of a tape fastener 9 of the disposable diaper is assembled through a self-adhesive 20 on a side edge 11. An open hole 23 is formed at the side edge 11 and the self-adhesive 20 is expanded from the open hole 23. The tape fastener 9 is fastened in such a way that a hook member 15 of a mechanical fastener positioned at a free end 17 peelably contacts with the adhesive agent 20 of the open hole 23.



## LEGAL STATUS

[Date of request for examination]

05.06.2001

[Date of sending the examiner's decision of rejection]

[Kind of final disposal of application other than the examiner's decision of rejection or application converted registration]

[Date of final disposal for application]

[Patent number]

3418332

[Date of registration]

11.04.2003

[Number of appeal against examiner's decision of rejection]

[Date of requesting appeal against examiner's decision of rejection]

[Date of extinction of right]

(19) 日本国特許庁 (J P)

(12) 公開特許公報 (A)

(11) 特許出願公開番号

特開平11-276524

(43) 公開日 平成11年(1999)10月12日

(51) Int.Cl.<sup>6</sup>

識別記号

F I

A 6 1 F 13/56  
5/44

A 4 1 B 13/02  
A 6 1 F 5/44

H  
H

審査請求 未請求 請求項の数 2 O L (全 3 頁)

(21) 出願番号 特願平10-81138

(22) 出願日 平成10年(1998) 3 月27日

(71) 出願人 000115108

ユニ・チャーム株式会社

愛媛県川之江市金生町下分182番地

(72) 発明者 末兼 真

香川県三豊郡豊浜町和田浜高須賀1531-7

ユニ・チャーム株式会社開発本部内

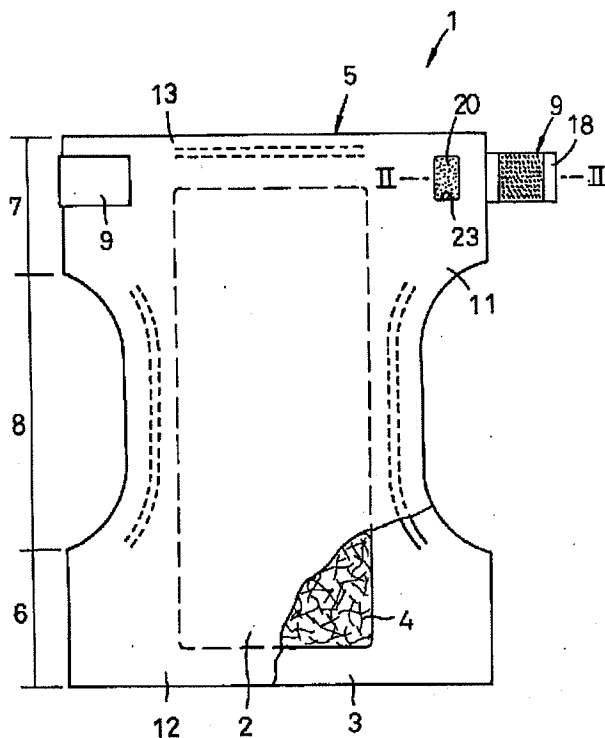
(74) 代理人 弁理士 白浜 吉治

(54) 【発明の名称】 使い捨ておむつ

(57) 【要約】

【課題】 使い捨ておむつにおいて、メカニカルファスナのフック部材を使用したテープファスナの経済的な仮り止めを可能にする。

【解決手段】 使い捨ておむつ1のテープファスナ9の固定端部16内面に粘着剤20を介しておむつ1の側縁部11に取り付けられる。側縁部11には、開孔23が形成されて、粘着剤20がその開孔23からのぞき、テープファスナ9は、自由端部17に位置するメカニカルファスナのフック部材15が、開孔23の粘着剤20に剥離可能に接合することで仮り止めされる。



## 【特許請求の範囲】

【請求項 1】 おむつの前後胴周り域側縁部どうしを取り外し可能に連結するためのテープファスナが前記両胴周り域のいずれか一方の側縁部から延出し、前記テープファスナの内面にメカニカルファスナを構成するフック部材とループ部材とのうちのフック部材が取り付けられている使い捨ておむつであって、

前記テープファスナの固定端部内面が粘着剤を介して前記一方の側縁部に接合し、前記側縁部から延出する自由端部を前記側縁部内面に折り重ねたときに前記フック部材が当接する前記側縁部内面のシートに開孔が形成され、該開孔で前記粘着剤が露出していることを特徴とする前記おむつ。

【請求項 2】 前記テープファスナの自由端部が前記側縁部内面に折り重ねられ、前記フック部材のフック先端部が前記開孔で露出している粘着剤に剥離可能に止着している請求項 1 記載のおむつ。

## 【発明の詳細な説明】

## 【0001】

【発明の属する技術分野】この発明は、テープファスナを使用して着用する使い捨ておむつに関する。

## 【0002】

【従来の技術】従来、テープファスナで前後胴周り域を取り外し可能に連結して着用する使い捨ておむつは、周知である。かかるテープファスナの一つとして、フック部材とループ部材とからなるメカニカルファスナのフック部材をテープ部材に取り付けて使用することがあることも、また周知である。

## 【0003】

【発明が解決しようとする課題】使い捨ておむつの製造過程から使用するまでの間、おむつ側縁部から延出するテープファスナをおむつ内方へ折曲して仮り止めし、おむつ取り扱いの際にファスナが邪魔にならないようにすることがある。そのときに、前記フック部材を使用したテープファスナは、それを仮り止めすべき部位にループ部材に匹敵する止着可能な相手方を持たなければならない。そのような相手方をそのことのためにのみ設けることは、おむつ製造コストを徒に上昇させることになりかねない。

【0004】そこで、この発明は、おむつの製造コストをほとんど上昇させることなく、フック部材を取り付けたテープファスナの仮り止めを容易にすることを課題にしている。

## 【0005】

【課題を解決するための手段】前記課題を解決するために、この発明が前提とするのは、おむつの前後胴周り域側縁部どうしを取り外し可能に連結するためのテープファスナが前記両胴周り域のいずれか一方の側縁部から延出し、前記テープファスナの内面にメカニカルファスナを構成するフック部材とループ部材とのうちのフック部

材が取り付けられている使い捨ておむつである。

【0006】かかる前提のもとに、この発明が特徴とするところは、前記テープファスナの固定端部内面が粘着剤を介して前記一方の側縁部に接合し、前記側縁部から延出する自由端部を前記側縁部内面に折り重ねたときに前記フック部材が当接する前記側縁部内面のシートに開孔が形成され、該開孔で前記粘着剤が露出していること、にある。

【0007】この発明の実施態様の一つにおいて、前記テープファスナが前記側縁部内面に折り重ねられ、前記フック部材のフック先端部が前記開孔で露出している粘着剤に剥離可能に止着している。

## 【0008】

【発明の実施の形態】添付の図面を参照し、この発明に係る使い捨ておむつの詳細を説明すると、以下のとおりである。

【0009】図 1 に部分破断平面図で示された使い捨ておむつ 1 は、透液性表面シート 2 と、不透液性裏面シート 3 と、これら両シート 2、3 間に介在する吸液性コア 4 とからなる本体 5、および本体 5 に取り付けられたテープファスナ 9 で構成されている。表裏面シート 2、3 は、コア 4 の周縁から側方へ延出して重なり合い、その重なり合う部分で互いに接合して、左右の側縁部 11 と、前後の端縁部 12、13 とを形成している。本体 5 の前後方向は、前胴周り域（前身頃）6 と、後胴周り域（後身頃）7 と、これら両域 6、7 間に位置する股下域 8 とで構成されている。後胴周り域 7 における側縁部 11 には、左右一対のテープファスナ 9 が取り付けられている。図には、一方のテープファスナ 9 が側縁部 11 から外方へ延びた状態で示され、もう一方のテープファスナ 9 が側縁部 11 の内方に折り重ねられた状態で示されている。かかるおむつ 1 を着用するときには、テープファスナ 9 を前胴周り域 6 のループ部材（図示せず）に取り外し可能に係合させて前後胴周り域 6、7 を連結する。

【0010】図 2 は、図 1 の I-I 線断面を示す図である。テープファスナ 9 は、テープ部材 10 とフック部材 15 とで構成されている。テープ部材 10 は、表裏面シート 2、3 間に位置する固定端部 16 と、側縁部 11 から延出する自由端部 17 とからなり、固定端部 16 は、その内面（図における上面）が粘着剤 20 を介して表面シート 2 の下面に接合している。自由端部 17 は、延びた先端に摘持域 18 を有し、摘持域 18 と側縁部 11 との間の内面にフック部材 15 が取り付けられている。フック部材 15 は、マジックテープ等の商品名で知られるメカニカルファスナの構成部材であって、シート状のベース 21 と、ベース 21 から起立する多数のフック 22 とで構成されている。ベース 21 は、ホットメルト等の接着剤を介してテープ部材 10 に接合する他に、ベース 21 または、およびテープ部材 10 を部分的に溶

融することによって接合する。表面シート 2 がテープ部材 10 と接合している部位には、開孔 23 が形成されており、開孔 23 で粘着剤 20 が露出している。裏面シート 3 は、テープ部材 10 の外面に接合している場合と、接合していない場合とがある。

【0011】図 2 において仮想線で示されたテープファスナ 9 は、その自由端部 17 が側縁部 11 の内面に折り重ねられている。フック 22 の先端部は、開孔 23 にのぞく粘着剤 20 に接触してフック 22 と粘着剤 20 とが弱く接合しており、折り重ねられた自由端部 17 が仮

止めされた状態にある。かかる自由端部 17 は、摘持域 18 を持って図の上方へ引っ張るようにすれば、粘着剤 20 から容易に離脱し、前後胴周り域 6 のループ部材に止着することができる。このように作用する開孔 23 は、フック 22 が進入して粘着剤 20 に接触することを可能にする開孔寸法を有していれば、図示例のように一つであってよいし、複数であってもよい。

【0012】このように構成された使い捨ておむつ 1

は、テープファスナ 9 をおむつ本体 5 に取り付けるための粘着剤 20 を利用してファスナ 9 の自由端部 17 を仮

止めするものであるから、その仮止めのために格別の資材を必要とするわけではなく、おむつ製造コストの上昇を抑えることが可能になる。また、このファスナ 9 で前後胴周り域 6、7 を連結するときには、フック部材 15 とループ部材との係合に加え、開孔 23 からのぞく\*

\*粘着剤 20 とループ部材や裏面シート 3 との剥離可能な接合が生じ得る。かかる接合によって、前後胴周り域 6、7 が比較的広い面積でしっかりと連結する。

#### 【0013】

【発明の効果】この発明にかかる使い捨ておむつは、メカニカルファスナのフック部材を使用したテープファスナが、そのテープファスナをおむつ本体へ取り付けするための粘着剤に対して仮止めされるから、その仮止めのために格別の資材が必要とならず、おむつ製造コストの上昇を抑えることができる。

#### 【図面の簡単な説明】

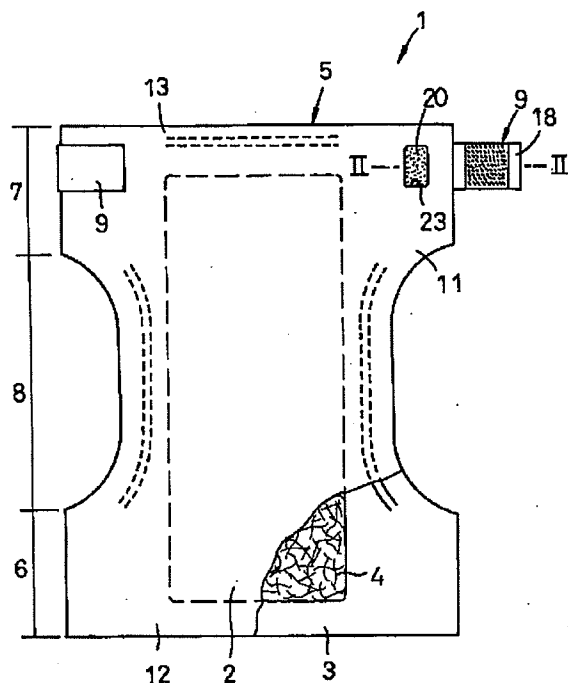
【図 1】使い捨ておむつの部分破断平面図。

【図 2】図 1 の I-I 線切断面を示す図。

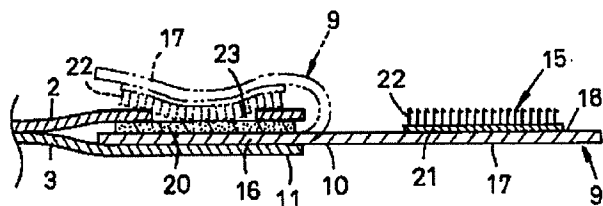
#### 【符号の説明】

1	おむつ
5	本体
6	後胴周り域
7	後胴周り域
9	テープファスナ
11	側縁部
15	フック部材
16	固定端部
17	自由端部
20	粘着剤
23	開孔

【図 1】



【図 2】



\* NOTICES \*

JPO and INPIT are not responsible for any damages caused by the use of this translation.

1. This document has been translated by computer. So the translation may not reflect the original precisely.
2. \*\*\*\* shows the word which can not be translated.
3. In the drawings, any words are not translated.

---

CLAIMS

---

[Claim(s)]

[Claim 1] The tape fastener for connecting the circumference region side edge sections of a diaper order drum dismountable extends from one side edge section of the circumference regions of both [ said ] drums. It is the disposable diaper with which the hook member of the hook members and loop-formation members which constitute a mechanical fastener in the inside of said tape fastener is attached. The fixed-end section inside of said tape fastener joins to one [ said ] side edge section through a binder. Said diaper characterized by having formed puncturing in the sheet of said side edge section inside with which said hook member contacts when the free edge which extends from said side edge section was turned up to said side edge section inside, and said binder being exposed by this puncturing.

[Claim 2] The diaper according to claim 1 which the free edge of said tape fastener was turned up by said side edge section inside, and the hook point of said hook member has attached firmly to the binder exposed by said puncturing possible [ exfoliation ].

---

[Translation done.]

\* NOTICES \*

JPO and INPIT are not responsible for any damages caused by the use of this translation.

1. This document has been translated by computer. So the translation may not reflect the original precisely.
2. \*\*\*\* shows the word which can not be translated.
3. In the drawings, any words are not translated.

---

DETAILED DESCRIPTION

---

[Detailed Description of the Invention]

[0001]

[Field of the Invention] This invention relates to the disposable diaper worn using a tape fastener.

[0002]

[Description of the Prior Art] Conventionally, the disposable diaper which connects the circumference region of an order drum dismountable, and wears it with a tape fastener is common knowledge. It is also common knowledge that it may be used as one of the tape fasteners of these, attaching in a tape member the hook member of the mechanical fastener which consists of a hook member and a loop-formation member.

[0003]

[Problem(s) to be Solved by the Invention] The temporary stop of the tape fastener which extends from the diaper side edge section is bent and carried out to the method of the inside of a diaper, and it is made for a fastener not to become obstructive in the case of diaper handling until it uses it from the manufacture process of a disposable diaper. The tape fastener which used said hook member then must have the other party who is equal to a loop-formation member and who can be attached firmly in the part which should carry out the temporary stop of it. Preparing such the other party only for that may make a diaper manufacturing cost rise to \*\*.

[0004] Then, this invention makes it the technical problem to make easy the temporary stop of the tape fastener which attached the hook member, without raising most manufacturing costs of a diaper.

[0005]

[Means for Solving the Problem] In order to solve said technical problem, it is the disposable diaper with which the hook member of the hook members and loop-formation members which a tape fastener for a premise [ invention / this ] to connect the circumference region side edge sections of a diaper order drum dismountable extends from one side edge section of the circumference regions of both [ said ] drums, and constitute a mechanical fastener in the inside of said tape fastener is attached.

[0006] The place by which this invention is characterized at the basis of this premise The fixed-end section inside of said tape fastener joins to one [ said ] side edge section through a binder. When the free edge which extends from said side edge section is turned up to said side edge section inside, puncturing is formed in the sheet of said side edge section inside with which said hook member contacts, and it is in said binder being exposed by this puncturing.

[0007] In one of the embodiments of this invention, said tape fastener was turned up by said side edge section inside, and the hook point of said hook member has attached firmly to the binder exposed by said puncturing possible [ exfoliation ].

[0008]

[Embodiment of the Invention] It is as follows when the detail of the disposable diaper concerning this invention is explained with reference to an attached drawing.

[0009] The disposable diaper 1 shown in drawing 1 with the partial fracture top view consists of tape fasteners 9 attached in the liquid permeability surface sheet 2, the non-liquid-permeable nature rear-face

sheet 3, both [ these ] the sheets 2, the body 5 that consists of an absorbent core 4 which intervenes among three, and the body 5. It extends from the periphery of a core 4 to the side, joins mutually in overlap and its overlapping part, and the front rear-face sheets 2 and 3 form the side edge section 11 on either side and the edge sections 12 and 13 of order. The cross direction of a body 5 consists of a circumference region 6 of a forward fuselage assembly (around the past time), a circumference region 7 of a back drum (around the time [ Later self ]), and both [ these ] the regions 6 and the length-from-the-crotch-to-the-cuff region 8 located among seven. The tape fastener 9 of a right-and-left pair is attached in the side edge section 11 in the circumference region 7 of a back drum. One tape fastener 9 is shown in drawing in the condition of having extended from the side edge section 11 to the method of outside, and another tape fastener 9 is shown in it, after having been turned up by the way among the side edge sections 11. When wearing this diaper 1, the tape fastener 9 is made to engage with the loop-formation member (not shown) of the circumference region 6 of a forward fuselage assembly dismountable, and the circumference regions 6 and 7 of an order drum are connected.

[0010] Drawing 2 is drawing showing the II-II line cross section of drawing 1. The tape fastener 9 consists of a tape member 10 and a hook member 15. The tape member 10 consisted of the front rear-face sheet 2, the fixed-end section 16 located among three, and a free edge 17 which extends from the side edge section 11, and the inside (top face in drawing) has joined the fixed-end section 16 to the inferior surface of tongue of the surface sheet 2 through a binder 20. The free edge 17 has \*\*\*\*\* 18 at the tip which extended, and the hook member 15 is attached in the inside between \*\*\*\*\* 18 and the side edge section 11. The hook member 15 is a configuration member of the mechanical fastener known for the trade name of a piece of Velcro etc., and consists of the sheet-like base 21 and hook 22 of a large number which stand up from the base 21. The base 21 is joined by joining to the tape member 10 through adhesives, such as hot melt, and also fusing the base 21 or/and the tape member 10 partially. Puncturing 23 is formed in the part which the surface sheet 2 has joined to the tape member 10, and the binder 20 is exposed by puncturing 23. It may have joined to the external surface of the tape member 10, or the rear-face sheet 3 may not be joined.

[0011] As for the tape fastener 9 shown by the imaginary line in drawing 2, the free edge 17 is turned up by the inside of the side edge section 11. The point of hook 22 contacts the binder 20 removed to puncturing 23, the hook 22 and the binder 20 have joined weakly and the turned-up free edge 17 is in the condition that the temporary stop was carried out. If this free edge 17 has \*\*\*\*\* 18 and it is pulled above the drawing, it can secede from a binder 20 easily and can be attached firmly to the loop-formation member of the circumference region 6 of a forward fuselage assembly. Thus, as long as the puncturing 23 which acts has the puncturing dimension which makes it possible for hook 22 to advance and to contact a binder 20, it may be one like the example of illustration, and may be plural.

[0012] Thus, it becomes possible not to necessarily need the materials according to rank for the temporary stop, and to suppress the rise of a diaper manufacturing cost, since the constituted disposable diaper 1 carries out the temporary stop of the free edge 17 of a fastener 9 using the binder 20 for attaching the tape fastener 9 in the body 5 of a diaper. Moreover, when connecting the circumference regions 6 and 7 of an order drum with this fastener 9, in addition to engagement to the hook member 15 and a loop-formation member, the junction in which exfoliation with a binder 20, and the loop-formation member and the rear-face sheet 3 which are removed from puncturing 23 is possible may arise. By this junction, the circumference regions 6 and 7 of an order drum connect firmly in a comparatively large area.

[0013]

[Effect of the Invention] Since the temporary stop of the tape fastener which used the hook member of a mechanical fastener is carried out to the binder for attaching that tape fastener in the body of a diaper, the materials according to rank are not needed for that temporary stop, and the disposable diaper concerning this invention can suppress the rise of a diaper manufacturing cost.

---

[Translation done.]

\* NOTICES \*

JPO and INPIT are not responsible for any damages caused by the use of this translation.

1. This document has been translated by computer. So the translation may not reflect the original precisely.
2. \*\*\*\* shows the word which can not be translated.
3. In the drawings, any words are not translated.

---

TECHNICAL FIELD

---

[Field of the Invention] This invention relates to the disposable diaper worn using a tape fastener.

---

[Translation done.]



\* NOTICES \*

JPO and INPIT are not responsible for any damages caused by the use of this translation.

1. This document has been translated by computer. So the translation may not reflect the original precisely.
2. \*\*\*\* shows the word which can not be translated.
3. In the drawings, any words are not translated.

---

PRIOR ART

---

[Description of the Prior Art] Conventionally, the disposable diaper which connects the circumference region of an order drum dismountable, and wears it with a tape fastener is common knowledge. It is also common knowledge that it may be used as one of the tape fasteners of these, attaching in a tape member the hook member of the mechanical fastener which consists of a hook member and a loop-formation member.

---

[Translation done.]

\* NOTICES \*

JPO and INPIT are not responsible for any damages caused by the use of this translation.

1. This document has been translated by computer. So the translation may not reflect the original precisely.
2. \*\*\*\* shows the word which can not be translated.
3. In the drawings, any words are not translated.

---

EFFECT OF THE INVENTION

---

[Effect of the Invention] Since the temporary stop of the tape fastener which used the hook member of a mechanical fastener is carried out to the binder for attaching that tape fastener in the body of a diaper, the materials according to rank are not needed for that temporary stop, and the disposable diaper concerning this invention can suppress the rise of a diaper manufacturing cost.

---

[Translation done.]

\* NOTICES \*

JPO and INPIT are not responsible for any damages caused by the use of this translation.

- 1.This document has been translated by computer. So the translation may not reflect the original precisely.
- 2.\*\*\*\* shows the word which can not be translated.
- 3.In the drawings, any words are not translated.

---

TECHNICAL PROBLEM

---

[Problem(s) to be Solved by the Invention] The temporary stop of the tape fastener which extends from the diaper side edge section is bent and carried out to the method of the inside of a diaper, and it is made for a fastener not to become obstructive in the case of diaper handling until it uses it from the manufacture process of a disposable diaper. The tape fastener which used said hook member then must have the other party who is equal to a loop-formation member and who can be attached firmly in the part which should carry out the temporary stop of it. Preparing such the other party only for that may make a diaper manufacturing cost rise to \*\*.

[0004] Then, this invention makes it the technical problem to make easy the temporary stop of the tape fastener which attached the hook member, without raising most manufacturing costs of a diaper.

---

[Translation done.]

\* NOTICES \*

JPO and INPIT are not responsible for any damages caused by the use of this translation.

- 1.This document has been translated by computer. So the translation may not reflect the original precisely.
- 2.\*\*\*\* shows the word which can not be translated.
- 3.In the drawings, any words are not translated.

---

MEANS

---

[Means for Solving the Problem] In order to solve said technical problem, it is the disposable diaper with which the hook member of the hook members and loop-formation members which a tape fastener for a premise [ invention / this ] to connect the circumference region side edge sections of a diaper order drum dismountable extends from one side edge section of the circumference regions of both [ said ] drums, and constitute a mechanical fastener in the inside of said tape fastener is attached.

[0006] The place by which this invention is characterized at the basis of this premise The fixed-end section inside of said tape fastener joins to one [ said ] side edge section through a binder. When the free edge which extends from said side edge section is turned up to said side edge section inside, puncturing is formed in the sheet of said side edge section inside with which said hook member contacts, and it is in said binder being exposed by this puncturing.

[0007] In one of the embodiments of this invention, said tape fastener was turned up by said side edge section inside, and the hook point of said hook member has attached firmly to the binder exposed by said puncturing possible [ exfoliation ].

[0008]

[Embodiment of the Invention] It is as follows when the detail of the disposable diaper concerning this invention is explained with reference to an attached drawing.

[0009] The disposable diaper 1 shown in drawing 1 with the partial fracture top view consists of tape fasteners 9 attached in the liquid permeability surface sheet 2, the non-liquid-permeable nature rear-face sheet 3, both [ these ] the sheets 2, the body 5 that consists of an absorbent core 4 which intervenes among three, and the body 5. It extends from the periphery of a core 4 to the side, joins mutually in overlap and its overlapping part, and the front rear-face sheets 2 and 3 form the side edge section 11 on either side and the edge sections 12 and 13 of order. The cross direction of a body 5 consists of a circumference region 6 of a forward fuselage assembly (around the past time), a circumference region 7 of a back drum (around the time [ Later self ]), and both [ these ] the regions 6 and the length-from-the-crotch-to-the-cuff region 8 located among seven. The tape fastener 9 of a right-and-left pair is attached in the side edge section 11 in the circumference region 7 of a back drum. One tape fastener 9 is shown in drawing in the condition of having extended from the side edge section 11 to the method of outside, and another tape fastener 9 is shown in it, after having been turned up by the way among the side edge sections 11. When wearing this diaper 1, the tape fastener 9 is made to engage with the loop-formation member (not shown) of the circumference region 6 of a forward fuselage assembly dismountable, and the circumference regions 6 and 7 of an order drum are connected.

[0010] Drawing 2 is drawing showing the II-II line cross section of drawing 1. The tape fastener 9 consists of a tape member 10 and a hook member 15. The tape member 10 consisted of the front rear-face sheet 2, the fixed-end section 16 located among three, and a free edge 17 which extends from the side edge section 11, and the inside (top face in drawing) has joined the fixed-end section 16 to the inferior surface of tongue of the surface sheet 2 through a binder 20. The free edge 17 has \*\*\*\*\* 18 at the tip which extended, and the hook member 15 is attached in the inside between \*\*\*\*\* 18 and the side edge section 11. The hook member 15 is a configuration member of the mechanical fastener known

for the trade name of a piece of Velcro etc., and consists of the sheet-like base 21 and hook 22 of a large number which stand up from the base 21. The base 21 is joined by joining to the tape member 10 through adhesives, such as hot melt, and also fusing the base 21 or/and the tape member 10 partially. Puncturing 23 is formed in the part which the surface sheet 2 has joined to the tape member 10, and the binder 20 is exposed by puncturing 23. It may have joined to the external surface of the tape member 10, or the rear-face sheet 3 may not be joined.

[0011] As for the tape fastener 9 shown by the imaginary line in drawing 2, the free edge 17 is turned up by the inside of the side edge section 11. The point of hook 22 contacts the binder 20 removed to puncturing 23, the hook 22 and the binder 20 have joined weakly and the turned-up free edge 17 is in the condition that the temporary stop was carried out. If this free edge 17 has \*\*\*\*\* 18 and it is pulled above the drawing, it can secede from a binder 20 easily and can be attached firmly to the loop-formation member of the circumference region 6 of a forward fuselage assembly. Thus, as long as the puncturing 23 which acts has the puncturing dimension which makes it possible for hook 22 to advance and to contact a binder 20, it may be one like the example of illustration, and may be plural.

[0012] Thus, it becomes possible not to necessarily need the materials according to rank for the temporary stop, and to suppress the rise of a diaper manufacturing cost, since the constituted disposable diaper 1 carries out the temporary stop of the free edge 17 of a fastener 9 using the binder 20 for attaching the tape fastener 9 in the body 5 of a diaper. Moreover, when connecting the circumference regions 6 and 7 of an order drum with this fastener 9, in addition to engagement to the hook member 15 and a loop-formation member, the junction in which exfoliation with a binder 20, and the loop-formation member and the rear-face sheet 3 which are removed from puncturing 23 is possible may arise. By this junction, the circumference regions 6 and 7 of an order drum connect firmly in a comparatively large area.

---

[Translation done.]

\* NOTICES \*

JPO and INPIT are not responsible for any damages caused by the use of this translation.

1. This document has been translated by computer. So the translation may not reflect the original precisely.
2. \*\*\*\* shows the word which can not be translated.
3. In the drawings, any words are not translated.

---

DESCRIPTION OF DRAWINGS

---

[Brief Description of the Drawings]

[Drawing 1] The partial fracture top view of a disposable diaper.

[Drawing 2] Drawing showing the II-II line cutting plane of drawing 1 .

[Description of Notations]

1 Diaper

5 Body

6 Circumference Region of Back Drum

7 Circumference Region of Back Drum

9 Tape Fastener

11 Side Edge Section

15 Hook Member

16 Fixed-End Section

17 Free Edge

20 Binder

23 Puncturing

---

[Translation done.]

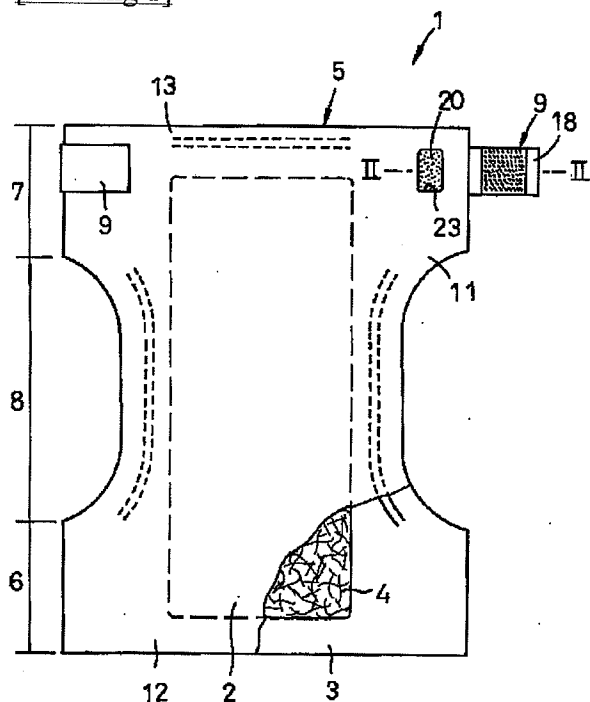
## \* NOTICES \*

JPO and INPIT are not responsible for any damages caused by the use of this translation.

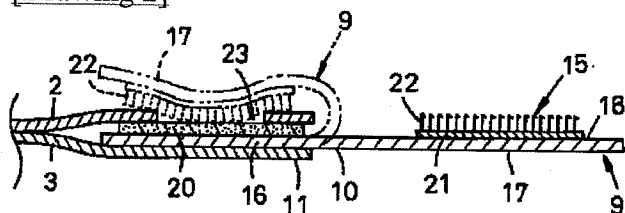
1. This document has been translated by computer. So the translation may not reflect the original precisely.
2. \*\*\*\* shows the word which can not be translated.
3. In the drawings, any words are not translated.

## DRAWINGS

[Drawing 1]



[Drawing 2]



[Translation done.]